

CLAIMS

What is claimed is:

1           1.     A method for correcting a network address for an object device,  
2     the method comprising:  
3                 (a)     reading, from a record, a recorded network address and a  
4     recorded unique enduring identification for the object device;  
5                 (b)     querying the recorded network address for a returned unique  
6     enduring identification;  
7                 (c)     comparing the returned unique enduring identification with  
8     the recorded unique enduring identification; and,  
9                 (d)     responsive to a mismatch between the returned unique  
10    enduring identification and the recorded unique enduring identification, finding a  
11    current network address for the object device and replacing the recorded  
12    network address with the current network address.

1           2.     The method of claim 1 wherein querying the recorded network  
2     address for a returned unique enduring identification includes:  
3                 (a)     addressing a unique enduring identification query to the  
4     recorded network address; and,  
5                 (b)     receiving the response to the query.

1           3.     The method of claim 1 wherein querying the recorded network  
2     address for a returned unique enduring identification includes performing an  
3     SNMP Get call to the recorded network address.

1           4.     The method of claim 1 wherein finding a current network address  
2     for the object device includes:

- 3 (a) reading, from the record, a recorded hostname for the object  
4 device; and,  
5 (b) retrieving the current network address for the recorded  
6 hostname.

1 5. The method of claim 1 wherein finding a current network address  
2 for the object device includes:

- 3 (a) reading, from the record, a recorded hardware address for  
4 the object device;  
5 (b) sending an network multicast request for hardware  
6 addresses;  
7 (c) receiving responses to the network multicast for hardware  
8 addresses;  
9 (d) searching the responses for a response having a match to  
10 the recorded hardware address; and,  
11 (e) extracting the current network address from the response  
12 having a match to the recorded hardware address.

1 6. The method of claim 5 further including iteratively repeating steps  
2 (b) through (d) until a match to the recorded hardware address is found in the  
3 responses.

1 7. The method of claim 1 further including iteratively repeating steps  
2 (b) through (d) until a match occurs between the returned unique enduring  
3 identification and the recorded unique enduring identification.

1 8. A system for correcting a network address for an object device,  
2 the system comprising:  
3 (a) a record having a recorded network address and a recorded  
4 unique enduring identification for an object device;

5 (b) a reader configured to read, from the record, the recorded  
6 network address and the recorded unique enduring identification for the object  
7 device;

8 (c) an interrogator configured to query the recorded network  
9 address for a returned unique enduring identification;

10 (d) a comparator configured to compare the returned unique  
11 enduring identification with the recorded unique enduring identification; and,

12 (e) a rectifier configured to respond to a mismatch between the  
13 returned unique enduring identification and the recorded unique enduring  
14 identification, by finding a current network address for the object device and  
15 replacing the recorded network address with the current network address.

1 9. The system of claim 8 wherein the investigator includes:

2 (a) a dispatcher configured to address a unique enduring  
3 identification query to the recorded network address; and,

4 (b) a receiver configured to receive the response to the query.

1 10. The system of claim 8 wherein the investigator includes a manager  
2 configured to perform an SNMP Get call to the recorded network address.

1 11. The system of claim 8 wherein:

2 (a) the record further includes a recorded hostname for the  
3 object device;

4 (b) the reader is further configured to read, from the record, a  
5 recorded hostname for the object device; and,

6 (c) wherein the rectifier includes a retriever configured to  
7 retrieve the current network address for the recorded hostname.

1 12. The system of claim 8 wherein:

(a) the record further includes a recorded hardware address for the object device;

(b) the reader is further configured to read, from the record, a recorded hardware address for the object device; and,

(c) the rectifier includes:

(i) a broadcaster configured to send a network multicast request for hardware addresses;

(ii) a listener configured to receive responses to the network multicast for hardware addresses;

(ii) an investigator configured to search the responses for a response having a match to the recorded hardware address; and

(iv) an extractor configured to extract the current network address from the response having a match to the recorded hardware address.

13. A program storage device readable by a computer, tangibly embodying a program, applet, or instructions executable by the computer to perform method steps for correcting a network address for a object device, the method steps comprising:

(a) reading, from a record, a recorded network address and a recorded unique enduring identification for the object device;

(b) querying the recorded network address for a returned unique enduring identification;

(c) comparing the returned unique enduring identification with the recorded unique enduring identification; and,

(d) responsive to a mismatch between the returned unique enduring identification and the recorded unique enduring identification, finding a current network address for the object device and replacing the recorded network address with the current network address.

1           14.    The program storage device of claim 13 wherein the method step  
2 of querying the recorded network address for a returned unique enduring  
3 identification includes:

- 4                   (a)    addressing a unique enduring identification query to the  
5 recorded network address; and,  
6                   (b)    receiving the response to the query.

1           15.    The program storage device of claim 13 wherein the method step  
2 of querying the recorded network address for a returned unique enduring  
3 identification includes performing an SNMP Get call to the recorded network  
4 address.

1           16.    The program storage device of claim 13 wherein the method step  
2 of finding a current network address for the object device includes:  
3                   (a)    reading, from the record, a recorded hostname for the object  
4 device; and,  
5                   (b)    retrieving the current network address for the recorded  
6 hostname.

1           17.    The program storage device of claim 13 wherein the method step  
2 of finding a current network address for the object device includes:  
3                   (a)    reading, from the record, a recorded hardware address for  
4 the object device;  
5                   (b)    sending a network multicast request for hardware  
6 addresses;  
7                   (c)    receiving responses to the network multicast for hardware  
8 addresses;  
9                   (d)    searching the responses for a response having a match to  
10 the recorded hardware address; and,

11 (e) extracting the current network address from the response  
12 having a match to the recorded hardware address.

1 18. The program storage device of claim 17 wherein the method steps  
2 further included iteratively repeating steps (b) through (d) until a match to the  
3 recorded hardware address is found in the responses.

1 19. The program storage device of claim 13 wherein the method steps  
2 further included iteratively repeating steps (b) through (d) until a match occurs  
3 between the returned unique enduring identification and the recorded unique  
4 enduring identification.

Accepted for filing